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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/624,360	07/22/2003	David W. Manning		7676

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EXAMINER

CHIN, RANDALL E

ART UNIT	PAPER NUMBER
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1744

DATE MAILED: 10/01/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/624,360

Applicant(s)

MANNING ET AL.

Examiner

Randall Chin

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 10082003.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: On p. 4, line 5, it would appear that the recitation "or belt drive" should be deleted for clarity.

Appropriate correction is required.

2. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: The recitation that the motor is a "low voltage" DC motor in claim 6 lacks antecedent basis in the specification.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over O'Brien '740.

The patent to O'Brien '740 teaches a battery-powered sewer and drain cleaner 10 (Fig. 1) comprising, a frame 11 and 12, a rotatable drum 28 (col. 3, lines 53-65) mounted on said frame which has a flexible plumber's snake defined by cable coil 50 (Fig. 2) associated therewith, a motor 58 mounted on said frame, said motor having a driven shaft (not labeled but shown in Fig. 1) operatively connected to said drum for

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rotating the same, and a "control" connected to said DC motor for controlling the operation thereof which can merely be the on/off switch for activating the motor 58 or the device itself. The patent to O'Brien '740 discloses all of the recited subject matter with the exception of a rechargeable battery mounted on said frame for powering a DC motor. It should be noted here that one of O'Brien's intended functions or goals for the sewer and drain cleaner is to facilitate transport by a user and which can be wheeled or skidded, as the job conditions require, up ramps and stairs, into and out of transport trucks as well as enabling handling of the machine through doorways and the like (see col. 1, lines 59-66, col. 4, lines 72-74, and col. 5, lines 26-29, for example). Thus, it would have been obvious to one of ordinary skill in the art to have modified O'Brien's cleaner such that the motor is a DC motor and includes a rechargeable battery mounted on the frame for powering the DC motor for the intended purpose of facilitating portability and handling of the device, avoiding the need for extension cords leading to electrical outlets as well as enabling the battery to be recharged for continued and prolonged usage.

As for claim 2, the motor is operatively connected to the drum by a belt drive 60 (Fig. 1).

As for claim 3 reciting that the motor is operatively connected to the drum by a gear drive, one skilled in the art would find it obvious to use a belt or gear arrangement between the motor and drum since they are practically functional equivalents of each other in order to drive the drum. The choice also depends on manufacturing and design requirements.

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As for claim 4, one skilled in the art providing for a rechargeable battery would find it obvious to provide for a battery "pack" as such is conventionally known in the rechargeable battery art. A "battery pack" can be easily handled and recharged.

As for claims 5 and 6, the recitations of a "high speed, high torque" motor and "low voltage" DC motor, respectively, are deemed merely relative limitations absent any further specific speed, torque or voltage values. In any case, values for motor speed, torque or voltage are deemed obvious since through an optimization process, one skilled in the art would find it obvious to select optimum and appropriate values for the particular function for cleaning drains and sewers.

As for claim 7, one skilled in the art would find it obvious to provide for a motor and voltage control for added safety purposes as well as control the rotational output of the motor depending on the cleaning task at hand.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The patents to O'Brien, Prange, and Saleckker are relevant to sewer and drain cleaner arrangements.

6. Any inquiry concerning this communication or earlier communication from the Examiner should be directed to Randall Chin whose telephone number is (571) 272-1270. The Examiner can normally be reached on Monday through Thursday and every other Friday.

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If attempts to reach the Examiner are unsuccessful, the Examiner's supervisor, Robert Warden, can be reached at (571) 272-1281. The number for Technology Center 1700 is (571) 272-1700.

The central fax number for the organization where this application or proceeding is assigned is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



R. Chin



Randall Chin
Primary Examiner
Art Unit 1744